## ORIGINAL

| 1  | BEFORE THE PUBLIC UTILITIES COMMISSION  |
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| 2  | OF THE STATE OF HAWAII  |
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| 4  | In the Matter of  |
| 5  | PUBLIC UTILITIES COMMISSION   |
| 6  | Docket No. 2008-0273 2 2  |
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| 9  | In the Matter of  PUBLIC UTILITIES COMMISSION  Docket No. 2008-0273 MM SSION  HEARING |
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| 11 | MOTION TO COMPEL  |
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| 13 |   |
| 14 | PUC Hearing Room  |
| 15 | 465 S. King St., Room B-3, Honolulu, Hawaii 96813                                     |
| 16 | 9:30 a.m.   |
| 17 | Wednesday, April 7, 2010  |
| 18 |   |
| 19 |   |
| 20 |   |
| 21 |   |
| 22 | BEFORE: BARBARA ACOBA, CSR No. 412, RPR   |
| 23 | Notary Public, State of Hawaii  |
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| 1  | APPEARANCES:       |                                |
| 2  | Commissioners:     | Chairman Carlito Caliboso      |
| 3  |                    | Commissioner John Cole         |
| 4  |                    | Commissioner Leslie Kondo      |
| 5  |                    |                                |
| 6  | PUC Counsel:       | Stacey Djou                    |
| 7  |                    |                                |
| 8  | Consumer Advocate: | Lane Tsuchiyama                |
| 9  |                    |                                |
| 10 | HECo. Companies:   | Rod Aoki, Esq.                 |
| 11 |                    | 1840 Gateway Drive, Suite 200  |
| 12 |                    | San Mateo, California 94404    |
| 13 | l<br>İ             |                                |
| 14 |                    | Scott Seu                      |
| 15 |                    | Marisa Chun                    |
| 16 |                    |                                |
| 17 | Zero Emissions:    | Erik Kvam                      |
| 18 |                    | 2800 Woodlawn Drive, Suite 131 |
| 19 |                    | Honolulu, Hawaii 96822         |
| 20 |                    |                                |
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CHAIRMAN CALIBOSO: Good morning. I'd like to call this proceeding to order. My name is Carlito Caliboso, Chairman of the Public Utilities Commission. I'm joined by Commissioner John Cole and Commissioner Les Kondo. This is for Docket No. 2008-0273, the Public Utilities Commission's investigation of the feed-in tariffs and this is about Zero Emissions Leasing's motion to compel. Can I have the parties appearances for the record, please.

MR. KVAM: Yes. Erik Kvam of Zero Emissions Leasing, LLC.

MR. AOKI: Good morning, Mr. Chairman,
Commissioner Cole, and Commissioner Kondo. Rod Aoki
appearing on behalf of Hawaiian Electric Company, Inc.,
Maui Electric Company Limited, and Hawaii Electric Light
Company, Inc. And together with me today are Mr. Scott
Seu, manager of resource acquisition for Hawaiian
Electric, and Darcy Endo-Omoto who's vice president of
government and community affairs for HECo.

CHAIRMAN CALIBOSO: Thank you.

MR. TSUCHIYAMA: Good morning, Mr. Chair, members of the Commission. Lane Tsuchiyama appearing on behalf of the Division of Consumer Advocacy.

CHAIRMAN CALIBOSO: All right. We have many parties in this docket, but I presume these are the only

parties appearing today. We do have Zero Emissions' motion to compel and Hawaiian Electric's opposition.

And we have received no other filings; is that correct?

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MR. AOKI: I believe, Mr. Chairman, that there was a filing by Blue Planet Foundation which was a statement of no position.

CHAIRMAN CALIBOSO: All right. Thank you.

Anything else? All right. We will have Movant go
first. The opposition by HECo. And Consumer Advocate,
you plan on making a statement?

MR. TSUCHIYAMA: We would just reserve the right to make comments as appropriate.

CHAIRMAN CALIBOSO: Okay. Thank you. Anything else before we get started? Movant.

MR. KVAM: Chairman, Commissioners, if the Hawaii Clean Energy Initiative is to have any success in accelerating renewable energy development in the state of Hawaii, it's got to put the Utility under obligations to interconnect and to purchase as-available renewable energy. That's what a feed-in tariff is supposed to do, create obligations on the Utility to interconnect renewable energy generation and to purchase renewable energy from the interconnected projects.

If the Commission is going to obligate the Utility to interconnect as-available generation, then

the Commission needs to know how much as-available renewable energy generation, we're talking about solar and wind, how much as-available renewable energy could be added to the grid without compromising reliability, taking into account the displacement of dispatchable fossil fuel generation with the as-available renewable energy. I call that question one. And the Utility has the ability to answer question one now with validated electric system models. The Utility possesses something called the General Electric Positive Sequence Load Flow Electric System Model validated for the islands of Oahu, Hawaii, and Maui.

The second part, the second obligation that the Commission needs to put the Utility under has to do with the purchase of renewable energy. If the Commission is going to obligate the Utility to purchase renewable energy, then the Commission needs to know how much as-available renewable energy should be added to the grid based on the relative costs of the as-available renewable energy and any dispatchable fossil fuel generation that's displaced by the as-available renewable energy. I call that question two. And for question two, the Utility also possesses models validated for the islands of Oahu, Maui, and Hawaii. That -- those electric system models are called the

General Electric Multi Area Production Simulation.

Now, the Utility's strategy in this docket has been very simple. They're avoiding any obligations to interconnect or purchase renewable energy. They've proposed a feed-in tariff, at Tier 1 and Tier 2, and now informally proposed a Tier 3 feed-in tariff that does not put them under any obligation to interconnect any as-available renewable energy; that does not put them under any obligation to purchase any as-available renewable energy.

The second thing that they've done to avoid obligations is to refuse to give the Commission answers to questions one and two. Again, those questions being: How much could be added without compromising reliability? How much should be added based on the costs? And it's, you know, it's important to realize that this identification, the key issues, I mean, the --these models that I've spoken of, the General Electric PSLF model and the GE MAPS model, their entire purpose is to answer those questions. I mean, this is the --they are the product of the thoughtful consideration of what is needed to actually accelerate renewable energy development on the island of Hawaii -- on the islands of Hawaii.

So Zero Emissions asked the information request

at issue here, Zero Emissions' request 107 to get an answer to question one. And basically in parts C and D of Zero Emissions' information request, it basically asks how much dispatchable fossil fuel generation could be displaced with as-available renewable energy without compromising reliability? It's a form of question one. The Utility refused to answer parts C and D of Zero Emissions' information request, claiming that any answer would be speculative and inconsistent with the meaningful assessment of system reliability in claiming that no single number could be provided that would be accurate. I submit, your Honor, that this is not a truthful or a helpful response to the information request. The Utility's basically concealing the existence and the results that they have obtained from the General Electric PSLF's electric system model that's been validated for the islands of Oahu, Hawaii, and Maui, and also I failed to mention before the Simulink electric system model that's been validated for the island of Lanai.

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Terry Sherlis said about the General Electric

PSLF models, and also the mass models, that they are

"sufficiently accurate to provide reasonable comparisons

of impacts on system metrics due to technology, policy,

or operational choices." Sufficiently accurate for

policy choices. That means that they're accurate enough for the Commission to make its decisions of what appropriate limits should be on the amounts of renewable energy that could be interconnected to the grid without compromising reliability and that should be interconnect -- and that should be purchased by the Utility based on the relative costs of the as-available renewable energy and any dispatchable fossil fuel generation that it displaces.

So if the Commission wants the Hawaii Clean Energy Initiative to succeed in the area of renewable energy, it needs truthful answers to question one.

Now one way to get an answer is to compel the Utility to answer Zero Emissions' information request 107.

A second way is for the Commission to pose its own information request, like the Commission's very first information request, PUC IR 101.

A third way for the Commission to get the answers is to appoint a qualified expert like National Renewable Energy Laboratory to use the Utility's own validated electric system models to answer question one for the Commission.

If the Commission doesn't want an answer to question one, if the Commission wants Hawaii Clean

Energy Initiative to fail in the area of renewable energy, then adopt the Utility's proposal for a reliability standards working group. It's basically the same as the integrated resource planning procedure in which intervenors would have no right to obtain answers to question one. No right to bring a motion like this one to get an answer to question one. The Utility would never have to answer question one and, therefore, the Commission would be in no position to obligate the Utility to either interconnect any new renewable generation or to obligate the Utility to purchase any new renewable energy.

Now, in their opposition papers, the Utility has argued that I failed to certify, having made a good faith effort to resolve the issue of information request 107, under Hawaii Civil Rule of Procedure 37(a)(2). A couple of points. First of all, the PUC's rules of practice procedure don't require a Rule 37(a)(2) certification. In fact, they don't -- as far as I can tell, they don't incorporate the Hawaii Rules of Civil Procedure at all.

Second of all, the procedural order in this case doesn't require a Rule 37(a)(2) certification. It merely says -- the only points it makes about motions to compel is that a party seeking production of documents,

notwithstanding a party's claim of confidentiality, may file a motion to compel production with the Commission.

Here, basically, the Utility's trying to impude bad faith failure to confer, to obscure the fact that the Utility has filed a 125 page reliability standards report that basically actively conceals the existence and results of validated electric system models that would furnish the answers to question one; models that are sufficiently accurate to answer Zero Emissions' information request 107 or whatever information request the Commission might put to the utilities. At the same time, they're saying that no single number can be provided that would be accurate.

Now, if you want to deny Zero Emissions' motion, you don't have to make up a rule of procedure that I'm supposed to have -- that Zero Emissions is supposed to have violated to deny it. You can deny the motion and ask your own information request of question one: How much renewable energy can be interconnected to the grid without compromising reliability? Or you can appoint an expert like National Renewable Energy Laboratory to use the company's own validated electric system models to get an answer to question one.

So in conclusion, if the Commission wants the Hawaii Clean Energy Initiative to succeed in the area of

renewable energy, it should grant Zero Emissions' 1 2 motion. Thank you. 3 CHAIRMAN CALIBOSO: Thank you. Questions, 4 Commissioner? COMMISSIONER COLE: I'll wait. 5 6 COMMISSIONER KONDO: I have some questions, 7 Mr. Kvam. Are you familiar with the order that the 8 Company had cited, Order No. 21112, the Commission 9 issued July 12, 2004? 10 MR. KVAM: I'm aware from its reference in 11 their opposition papers. 12 COMMISSIONER KONDO: In that order, the Commission did apply Hawaii Rule of Civil Procedure 13 37(a)(2) and required the Movant in that application, or 14 that motion, to actually confer with the Utility before 15 16 filing a motion to compel. Assuming the Commission 17 follows Commission precedent, meaning prior Commission orders, can you distinguish that situation from your 18 current situation? I mean, why should not the 19 20 Commission follow that prior order and require you to follow the Rules of Civil Procedure? 21 MR. KVAM: The Commission can choose to do 22 23 that, obviously. COMMISSIONER KONDO: Okay. So if the 24 Commission is gonna follow its precedent, then you would 25

concede that we should dismiss this motion as being premature?

MR. KVAM: You may dismiss it, but I would say that at the end of the day you still need an answer to question one: How much renewable energy can be interconnected without compromising reliability?

COMMISSIONER KONDO: Well, perhaps that's the purpose of the rule is you will talk with the Utility and you'll come out with some information that is satisfactory to you to answer question one and the Commission doesn't have to be involved.

MR. KVAM: Yeah, that -- well, yes. It's true.

That -- that -- that's a possibility. But I didn't make
the conference. I wasn't-- I certainly wasn't aware of
that rule at the time that I made the motion.

COMMISSIONER KONDO: Well, certainly you were aware of it after the opposition.

MR. KVAM: That's correct. Yes.

COMMISSIONER KONDO: Did you make any attempt after the opposition to discuss the substance of your motion with the Company and get resolution before the hearing?

MR. KVAM: No, I have not, your Honor.

COMMISSIONER KONDO: Under question one, hasn't the Commission answered that question by issuing the

order saying that the cap on the amount of FIT energy is 5 megawatts?

MR. KVAM: You mean 5%, your Honor. You mean 5%.

COMMISSIONER KONDO: 5%, I'm sorry. And project size being 5 megawatts Oahu. Hasn't that question been answered by the Commission? The Commission has set caps. This is what the Utility can incorporate. The Commission's made that determination. And this is what the Company should incorporate via the FIT tariff, hasn't the Commission spoken on that already?

MR. KVAM: They've established a cap, but the decision in order doesn't refer to any kind of action analysis to back up the fact -- I don't -- I don't view that as a fact finding, that 5% of as-available renewable energy could be added to the grid of each of the islands. I mean, it's a policy. It's a policy conclusion that they've reached, but I don't read it as a fact finding as to question one.

COMMISSIONER KONDO: I guess my concern is, you haven't filed a motion for reconsideration of the caps the Commission set in the FIT order. So the Commission has made the decision. Whether it's based upon fact, whether it's based upon policy, the Commission's made a

decision as to the caps. So the Commission, in my mind, has answered your question one and question two: How much should the Utility or can the Utility incorporate?

5% on Oahu. How much should the Utility incorporate?

5% on Oahu, with some exceptions. But the Commission has spoken on that issue. So I'm not understanding, I guess, the purpose of question one and question two as you've articulated them. It seems to me those questions have been answered by the Commission's order. Can you explain to me why maybe that's not -- my understanding of the Commission order perhaps is not accurate?

MR. KVAM: I think that those -- frankly, I think that those caps are based on guesses.

COMMISSIONER KONDO: But nevertheless, that's the order, 5%.

MR. KVAM: That is the order. I understand. I agree that that is what the Commission has decided.

COMMISSIONER KONDO: So what's the purpose of your information that you want given that the Commission has made a decision? Whether or not you agree with it. I don't agree with it. I dissented. But the point is, the Commission has spoken on that. So what's the purpose of your -- the information you want given that maybe the Commission's spoken as to issue one and issue two?

MR. KVAM: Because I believe that, you know, there's a public interest here which is, namely, that I think most everyone wants to see an acceleration of renewable energy developed in the state of Hawaii. If we don't have an idea how much could be added without compromising reliability, if we don't have any fact findings of that, then we're not gonna see the renewable energy development happen.

COMMISSIONER KONDO: Okay. Shouldn't this investigation or shouldn't your questions be more proper in phase two in the FIT update to investigate whether the caps are appropriate, whether the caps should be moved up or down? I mean, the Commission, like I said, has spoken on this issue. So it seems to me the information you seek, it's really irrelevant at this point.

MR. KVAM: Well, I disagree. I think it's entirely relevant.

COMMISSIONER KONDO: How would you get the Commission to change its decision at this point, assuming that the information comes back to you and it appears that the Utility can take 20% on its grid?

MR. KVAM: Well, the Utility's effectively asked the Commission to change its decision. It's omitted the 5% cap from its proposed feed-in tariff. So

they recognize, the Utility recognizes, as well as Zero Emissions does, that the Commission's cap is not based on the fact finding of what amount could be added without compromising reliability.

COMMISSIONER KONDO: Well, perhaps we need to read the order better, because my recollection of the order is the cap, with some off-ramps for the Utility as long as it doesn't impact reliability. As long as it doesn't cause unreasonable costs to the rate payer. But those balls seem to be in Utility's court, not Zero Emissions' court.

MR. KVAM: You know, do you have a question or I mean, I don't know. I don't want to just argue with you.

COMMISSIONER KONDO: Let me change gears a little. What information specifically would you want in response to your information request? What kind of responses are you expecting?

MR. KVAM: I would expect at the very least the results of the studies that -- and reports that have been obtained with the validated electric system models that the Utility possess.

COMMISSIONER KONDO: Have you gotten copies of those reports?

MR. KVAM: No.

COMMISSIONER KONDO: Have you asked for copies of those reports?

MR. KVAM: I believe that early on in this docket the two reports that I attached in my comments to the reliability standards report, there were two reports that said in a conclusory way, these models have been validated for Maui and for Hawaii, but they don't contain any figures, any quantitative information.

COMMISSIONER KONDO: Have you gotten copies of those reports -- I guess you answered no, but have you asked for copies of those reports? That was my question.

MR. KVAM: I did not, but I believe that they were produced in response to one of the other intervenor's requests.

COMMISSIONER KONDO: Have you read those reports?

MR. KVAM: Yes, I have.

COMMISSIONER KONDO: Okay. Do those reports contain the information that you want?

MR. KVAM: No, they don't.

COMMISSIONER KONDO: The reason why I ask that question, because it seems like the response is maybe not totally responsive but pretty responsive to your questions. And what I mean by that is, you ask: What

can be curtailed? And they don't necessarily respond to C, but they list to you the must-run units and the levels of energy that those units must -- or the minimum levels that those units must run at. So you can make a determination as to the amount that those units can be reduced or curtailed by taking the total megawatts that they generate versus the minimum that they have to run at. Doesn't that answer the question for you on A?

MR. KVAM: No. No.

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COMMISSIONER KONDO: Why not?

MR. KVAM: My motion is to get answers to C and

COMMISSIONER KONDO: Okay. I'm sorry.

MR. KVAM: And I believe that the information has been provided to answers C and D.

COMMISSIONER KONDO: I misspoke, C1. Doesn't that answer C1? Because you're asking in C1 the amount in kilowatt hours that the unit can be reduced or curtailed. And as I look at their responses, they're providing you with the capacity unit and the minimum run of the unit. So can't I take that capacity and minus the operating minimum and come out with the amount that it can be reduced or curtailed? So isn't that responsive to 1A -- I'm sorry, C1?

MR. KVAM: No, it's not.

COMMISSIONER KONDO: Why not?

MR. KVAM: I don't believe the information they furnished was for a 24-hour period, 24-hour load cycle. So the answer's no. They just gave kilowatt generating capacity ratings for their various facilities.

COMMISSIONER KONDO: But as I understand the response, and maybe you disagree with this, but I understood their response to say that during a particular 24-hour period, there's a lot of factors that come into play to determine how much units can be taken down and how much units must run. Do you disagree with that?

MR. KVAM: I beg your pardon?

COMMISSIONER KONDO: Do you disagree with that statement by the Company that there's a lot of circumstances that dictate what units can be reduced or curtailed and how much they can be reduced or curtailed during a 24-hour period?

MR. KVAM: I don't doubt it's a complex calculation which is why you use validated electric system models to find out the reliability effects from each of those units. Not just the dispatchable units, but the must-run units as well and what their regulating capacity is.

COMMISSIONER KONDO: But it seems to me their

answer is better than what you want, given that they're telling you across the broad universe of their units how much their units can be reduced or curtailed, because during the 24-hour period, I'm gonna guess that not all the units on Oahu are reduced or curtailed. Some are gonna run at higher levels than the amount that is the minimum run level that they're indicating on -- in their response. So isn't that answer better than what you want? Because it's telling you across the universe the minimum levels that their units can run. So I don't understand what you want in C1.

MR. KVAM: Well, I disagree. I think it's a nonanswer to the request.

then, the amount that the units are being reduced. I mean, I hear you saying that you don't disagree that there's other factors that will dictate what units are gonna be reduced and how much they're gonna be reduced. How did you expect the Company to respond to that given you don't provide them any assumptions? You're just asking in a vacuum in a 24-hour period what is being reduced, but it depends on the day; it depends on the conditions, right? And that's their response. So why is that nonresponsive?

MR. KVAM: It's a nonresponse. They haven't

furnished any kilowatt hour figures of actual curtailment.

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COMMISSIONER KONDO: But today may be very different than tomorrow as to what they curtail, because perhaps there's a unit out today so they can't curtail other units. Or Maui's a better situation, maybe it's windy today and so they don't curtail or they curtail that wind unit and tomorrow it's not windy so they don't curtail it at all.

MR. KVAM: These numbers are reasonably ascertainable by the Utility. I mean, the Utility's the one that has the data about what their power purchases are and are not from various curtailable units that are on their system. I don't have that information.

COMMISSIONER KONDO: Okay. Thank you.

CHAIRMAN CALIBOSO: Mr. Kvam, after you received the Company's responses, just want to confirm a couple things, did you do any supplemental information requests?

MR. KVAM: No, though I do intend to file information requests tomorrow regarding the Tier 3 tariffs.

CHAIRMAN CALIBOSO: I'm sorry, but regarding this particular question that's the subject of your motion to compel, did you do any supplemental

information requests?

MR. KVAM: I did not do supplemental information requests.

CHAIRMAN CALIBOSO: Did you contact the Company at all?

MR. KVAM: No, I did not. I made this motion about seven days after I received their response.

CHAIRMAN CALIBOSO: And you're aware that you had an opportunity to do so?

MR. KVAM: Yes. I might have, yes.

CHAIRMAN CALIBOSO: Okay. The Company.

MR. AOKI: Thank you, Mr. Chairman. I guess to begin with, the Company, for the record, will state that it disagrees with many of the statements made by Mr. Kvam in his opening statement and we are ready to respond to each one of them individually. I guess before we get to that, though, there is a procedural matter that has been addressed and that we've raised in our opposition, which is through the Commission's Order No. 21112 in Docket No. 030371, the Commission set forth a clear standard for motions to compel discovery, and I think the facts in that particular case were striking in how similar they are to the facts at issue here today.

In that situation, the Commission, following
Hawaii Rule of Civil Procedure Rule 37(a)(2), specified

that a motion to the Commission must include a certification the Movant has, in good faith, conferred or attempted to confer with the person or party, in that case failing to make a discovery, in an effort to secure the information material without Commission action. And this case it was Mr. Kvam's burden to come forward with proof that he met that standard and filed that certification. There's no evidence in the record to demonstrate that's been made.

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This is particularly a situation that I think warrants denial of the motion because as we point out in our opposition and the Commission is aware, this motion to compel was filed in the midst of a supplemental information request process that was agreed to in part by Zero Emissions Leasing, or at least not opposed, and which many of the parties availed themselves of and to which responses were filed by the Company on March 11th. So this is the timeframe.

The agreement to have the supplemental information request processed was agreed to and submitted to the Commission as part of the footnote to a letter request on February 23rd, 2010. Our initial responses to the 231 information request was made on March 1st, 2010. Supplemental requests were submitted by a number of parties on March 4th and those

responses -- responses to those supplemental information requests were submitted by the Company on March 11th.

And Zero Emissions' motion to compel came on March 8th in the middle that process without any attempt to contact anyone at the Company. And so on that basis alone, we believe that the standard was not met and Zero Emissions' motion should be denied.

I guess I would ask the Commission for guidance. If you would like us to respond to the rest of the allegations made by Mr. Kvam in his opening statement, we're happy to add to what we've already filed as part of our opposition.

CHAIRMAN CALIBOSO: Before you move on,

Mr. Aoki, would you, for the record, reference the

section in this Commission's administrative rules which

ties in the Hawaii Rules of Civil Procedure.

MR. AOKI: What we cited to in our papers,
Mr. Chairman, was a footnote in the Commission's Order
21112 which said that pursuant to Hawaii Administrative
Rules 6-61-1, the Commission may refer to the HRCP for
guidance whenever HAR Title 6, Chapter 61, is silent on
a matter.

CHAIRMAN CALIBOSO: All right. Thank you.

Anything from the Commissioners on this issue? You're asking for guidance, Mr. Aoki. I don't want to limit

you in making your record, so we have time if you want to proceed.

MR. AOKI: Thank you, Mr. Chairman. I guess very briefly to expand on what we already submitted in our opposition. First of all, this is not a case, you know, as Mr. Kvam mentioned, your standard stipulated procedural order where there was a blanket objection to producing information based on confidentiality. This is not a case where the companies did not answer and did not respond. In fact, the companies filed 18 pages, six detailed pages each for each utility company, responding to the request. I think this motion, you know, should be interpreted very narrowly. It's whether or not the companies complied with subparts C and D of Zero Emissions' request.

I think as Commissioner Kondo was alluding to and discussing with Mr. Kvam, this is a case where we provided detailed answers on what the companies could do as far as curtailing individual generating units. The issue was that Mr. Kvam was requesting, in his request, information which was basically speculative in nature. He was saying, based upon existing information that you have, tell us what in the future, how you in the future will curtail each individual generating unit on the various companies' systems. And what we came back with

in answer, as I think you alluded to, Commissioner Kondo, was that there are, in fact, many factors that would affect that decision for each individual unit, including things like system load, ambient conditions, maintenance issues, forced outages, derates, the status of as-available generation on the system that is not dispatchable by the company. And so if we were to provide any number at all as far as kilowatt hours, it would be a guess based on a number of assumptions that the Company tried to put forward. But inevitably, if any one of those elements were incorrect, that guess would also be wrong, and we would submit to the Commission that that is not a basis upon which to base policy, and particularly a basis upon which to set reliability standards. So we take issue with all of the allegations that the Company refused to answer Zero Emissions' questions; refused to answer the Commission's questions. We have put forth detailed answers to those.

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As to Mr. Kvam's general statement that
Reliability Standards Working Group will be some type of
vehicle through which he will be denied due process, I
think that that is absolutely incorrect. I think we
have made clear in our filings both of February 26 as
well as March -- I'm sorry, February 26 as well
March 31st, 2010, that the companies intend this process

to be a transparent and comprehensive state quarter process to which we would invite the Commission to appoint an independent facilitator to oversee that process to ensure that it is transparent and that parties have appropriate due process as part of that proceeding.

I suppose the last thing is, Mr. Kvam makes a suggestion that as an alternative to compelling some response to his information request, the Commission could appoint a qualified expert to investigate these types of issues. And I guess I would point out as part of our February 26th and March 31st filings, we have, in fact, suggested that it would be important to prevail upon certain of the national labs to bring in their expertise, in part to identify solutions to these issues that we recognize that can be implemented very quickly.

So with that, I think I'd close, Mr. Chairman, unless you have any further question.

CHAIRMAN CALIBOSO: Any questions?

COMMISSIONER KONDO: I have a question.

Assuming that the Commission is gonna rule on the substance of the motion, assuming that the questions that Mr. Kvam wants answered are relevant to the proceeding, why can't you give him information about the amount that the company-owned units are being reduced or

curtailed on the various systems and also provide him information as to the amount of the IPP generation, the levels that you're accepting? I know that you don't know how much they could put into the system because that's not your unit, but you certainly curtail or reduce the input that you take on the system in various Why can't you provide him that information conditions. on a typical 24-hour profile? You provide us that information on a typical 24-hour profile frequently and I look at your reliability standard, Attachment A, that you reference or Attachment 4, I'm sorry, and it has those type of 24-hour typical profiles. Why can't you provide him that information, even though he hasn't provided you with assumptions as to what to base your answer on?

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MR. AOKI: I think the concern, as we mentioned, I think as part of this process we have tried, including through the supplemental information request process, to be as transparent and open in disclosing information to the parties as possible. So the SIR process was agreed to, in part, so that if the responses to the original information request weren't sufficient, that the companies were willing to follow up to try to get answers. So I think to the extent that, you know, we could, you know, certainly be willing to do

that.

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That said, in response to the specific four corners of the information request presented, which was to make certain assumptions into the future without any types of guidelines or metrics upon which to do that for each generating unit and to run a kilowatt hour numbers, something very specific, that, we felt, would require somewhat speculation as not to be helpful to the record and not to add anything substantive. That said, on a system-wide basis, I think the reliability standard filing that we made, we tried to quantify those numbers to the extent we can looking at a number of variables on each system.

COMMISSIONER KONDO: One of his questions isn't forward looking. It's, what are being curtailed? What are being reduced? So it's not asking for you to speculate or guess. It's asking, currently, what's happening? And those answers you could provide him given a typical day, for instance, on Maui; is that correct?

MR. AOKI: I believe that's correct,

Commissioner. I believe as to existing levels of

curtailment, I know at least for the Company's nonfossil

units on certain of the systems, I'm thinking in

particular the HELCo. system, we have repeatedly, you

know, submitted the answer that wherever possible, the companies are curtailing back those resources to their minimums in consideration of appropriate reserves being on the system to accommodate as much as-available energy as possible. And I think in other responses, and I apologize, I can't recall offhand the responses to the other information requests that were submitted, and, again, just in the first round there were 231 with subparts and then there was the SIR process that may have already provided that information, but I can follow up.

COMMISSIONER KONDO: So your answer is yes?

MR. AOKI: Yes.

COMMISSIONER KONDO: Okay. Thank you.

MS. DJOU: Could I ask, would that information be helpful to the Commission given that I understand HECo.'s position to be that reliability constraints are based on existing plus planned units; is that correct?

MR. AOKI: That's correct.

MS. DJOU: To follow up on Commissioner Kondo's question. Given that, would you be able to provide a typical -- that would be the future issue that you were talking about, but I guess the direct question is: Would you be able to provide us existing plus planned and give us a typical, or you wouldn't be able to do

that until they come onto your system?

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MR. AOKI: That is my understanding. until we know what is coming on, when and what location, what the particular parameters are of each generating unit addition that's coming on, that it's very difficult to do that. I think given particular inputs and timeframes, you know, assumptions can be made and whatever the results of that analysis would be, would have to be taken in the context of the inputs that were provided. But that, again, is something that we hope to address as part of the Reliability Standards Working Group, to bring in the experts necessary to have the transparent and open state quarter process to analyze those issues, identify solutions, and implement them as soon as possible so that we can take on more as-available energy onto the systems.

COMMISSIONER COLE: This is for Mr. Aoki, too.

I know Mr. Kvam's IR 107 doesn't make direct mention of models, but he certainly has this morning, indicating that what he is after is results of a model run on different or amounts that could be added to the system.

If he had made it more clear, would you have information or results of model runs like that that would be responsive to a request like this?

MR. AOKI: Thank you, Commissioner. I also

noted in my notes that, you know, that's the first time we heard from Mr. Kvam and from Zero Emissions about these studies and what he purports them to say. I really don't know offhand. I could certainly check. I know there are some ongoing studies, which my understanding are confidential in nature. I don't know the status of whether or not they're completed.

COMMISSIONER COLE: Before Scott answers, do you know if there's been any other information request asking for results of runs of models?

MR. AOKI: I don't believe so.

COMMISSIONER COLE: Okay.

MR. SEU: Mr. Commissioner, with regard to some of these other studies, I think it's important to distinguish that, for example, a study that might look at a situation on Maui will or has been focused specifically on what are the integration issues pertaining to a specific proposed project. And the studies are not or were not intended to look at answering the overall question, what's the maximum amount of intermittent renewables that could be added to a particular system? So that's a very important distinction. And I think what we were trying to convey in our filing on proposing the Reliability Standards Working Group is that that's the kind of study that does

need to be commissioned and conducted to answer that question.

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COMMISSIONER COLE: Okay. Are you using study to be synonymous with model or is there a model where you can vary inputs and see what the outputs or varied results on the reliability of the system might be?

MR. SEU: The answer is yes, there are models. And as an example, when you have a model such as referred to from General Electric, it is a generic model and the model needs to be set up with the specifics of a particular electric system. So the model needs to be tailor-made specifically to, for example, the Maui system or the Big Island or Oahu, and once that is done, generally you go through a validation process to test whether or not the model is reasonably accurate in representing how the system will respond.

Once you have gone through that process, at that point you will construct the assumptions that are to be then built into the model and you're looking at specific scenarios. So that's the general process by which you use a model. And when we use the term studies, we generally just say, this is a wind integration study, for example, and by that we are implying that, yes, we will be using these models to conduct the actual analysis.

COMMISSIONER COLE: So are you through that validation process on any of the systems with various models of one model?

MR. SEU: We are -- we have done that validation for at least a study pertaining to the island of Maui. That particular study is being conducted under the terms of a confidential settlement agreement. What we would do as we look at the Reliability Standards Working Group is basically follow a similar process looking at Maui and very much possibly that we would use the same type of a model.

COMMISSIONER COLE: Okay. Thank you.

CHAIRMAN CALIBOSO: Thank you. Mr. Aoki, I think one of the things I understood you to say was that one of the difficulties in answering these questions are the number of assumptions that need to be made in order to do so. My question is: Would working more closely with the Movant on those questions and perhaps agreeing upon certain assumptions that can be made or used in answering those questions, would that have been helpful in allowing the Company to come up with a way to answer those questions?

MR. AOKI: I suppose it would've been more helpful in trying to provide some of the answers, but I don't know that it would've changed the conclusion that

the result of that process would be speculative absent a larger study of the entire system, as we were talking about. To make assumptions individually for generating units kind of in a vacuum, I don't know that would be helpful for anything that could be relied upon in establishing reliability standards or trying to set these numbers.

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With those assumptions and made that qualifying statement or made that argument that it's not worth anything or can't be used or relied upon, but you could've answered those questions based on assumptions agreed upon. Well, can you -- it could've been done that way, right, Mr. Aoki?

MR. AOKI: To make the assumptions and qualify the results accordingly.

CHAIRMAN CALIBOSO: Mr. Seu, you may respond.

MR. SEU: Mr. Chair, one thing I should clarify is that these are not simple models. These are not spreadsheet models that you input a few variables into cells and then let it go. The models as you look at the various assumptions, these are very complex assumptions which include how the different generating units may be operating at any given moment on the system; what the nature of the load flows are; and especially, too, the

behavior of the intermittent renewables and where they There are so many different variables and are located. permutations I would say that you can come up with. my basic point is that even with a certain set of assumptions that may have been provided in the information request, I don't believe that unless you know what the models are, how they are structured, and what they are set up to do, I don't know that those assumptions would have actually enabled the technical modelers to actually run the models. These models typically are, first, validated and then actually used over the course of many months. Now, I'm not a technical modeling expert in any way, so I'm not able today to explain the details that are required, but that's my understanding. CHAIRMAN CALIBOSO: Thank you. Is that it for HECo.? MR. AOKI: That's it. Thank you, Mr. Chairman. CHAIRMAN CALIBOSO: Would the Consumer Advocate like to make a statement or take a position on this at all? MR. TSUCHIYAMA: No. No position. CHAIRMAN CALIBOSO: Thank you. Mr. Kvam, as Movant you're entitled to close. Well, I think what we've heard is MR. KVAM:

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that validated electric system models, they've been admitted to exist for Maui. Actually, they're admitted to exist in the documents that I attached to my comments on the HECo. proposed reliability standards. It's up to the Commission. I mean, you can find caps. make up any kind of findings of caps you want, but ultimately we need answers to these two questions. Otherwise, renewable energy development in the state is gonna languish. You're looking at another year, maybe a couple more years, you know, till we get -- till we get the results of the process called Reliability Standards Working Group in which I haven't heard that the intervenors would have any right -- any information It's one thing to say, oh, it's transparent, but to not have the right to be able to sit here and assist and move to compel answers to information requests, that's not gonna -- that's not gonna serve.

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So, you know, I don't want to just rehash everything I said in my opening, but truthful answers are needed to these two questions and the two questions for which the Utility possesses validated models for, the two questions are: How much can be added without compromising reliability? How much should be added based on the relative costs of what you're adding? And I thank the Commission for its attention today.

CHAIRMAN CALIBOSO: Thank you. Any other questions? All right. Thank you very much. We will take it under advisement. We are adjourned. (Hearing concluded at 10:18 a.m.) 

| 1   | CERTIFICATE  |
|-----|--|
| 2   | STATE OF HAWAII )  |
| 3   | CITY AND COUNTY OF HONOLULU )                            |
| 4   | I, BARBARA ACOBA, Certified Shorthand                    |
| 5   | Reporter and Notary Public, State of Hawaii, do          |
| 6   | hereby certify:  |
| 7   | That on Wednesday, April 7, 2010, at                     |
| 8   | 9:30 a.m., the foregoing Hearing was taken down by me in |
| 9   | machine shorthand and was thereafter reduced to          |
| 10  | typewriting under my supervision; that the foregoing     |
| 11  | represents, to the best of my ability, a true and        |
| 12  | correct transcript of the proceedings had in the         |
| 13  | foregoing matter.  |
| 14  | I further certify that I am not an attorney              |
| 15  | for any of the parties hereto, nor in any way concerned  |
| 16  | with the cause.  |
| 17  | Dated this 13th day of April, 2010,                      |
| 18  | in Honolulu, Hawaii.                                     |
| 19  | DA HA  |
| 20  | BARBARA ACOBA, CSR NO. 412                               |
| 21  | Notary Public, State of Hawaii                           |
| 2 2 | My Commission Exp: 10-22-2012                            |
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